

Injury among Residents of Santa Cruz County, Arizona 2005

Injury is a public health problem that impacts the lives of thousands of Arizona residents each year. Chronic pain, disability, large medical bills, changes in quality of life, and premature death are just some of the possible effects of injuries. These effects can extend beyond injured individuals to their families and communities. With non-fatal injuries, family members are often required to provide care, which can result in time away from work, loss of income, and increases in stress within the family. At the community level, the financial burden of injuries can include medical expenses, rehabilitation, lost wages, and lost productivity. Most injuries are predictable and preventable. Understanding the causes of injury is an important step toward reducing injury-related morbidity and mortality.

The following report identifies the leading causes of injury among residents of Santa Cruz County in 2005. This report is intended to be used as a guide for strategy development, program implementation, and evaluation. The Arizona Department of Health Services Injury Prevention Program operates under the vision of reducing injuries in Arizona using integrated surveillance and evidence-based interventions. This report was generated to increase awareness of county-specific injury issues and to facilitate opportunities for effective injury prevention activities.

Figure 1. Injury Pyramid for Santa Cruz County Residents, Arizona 2005

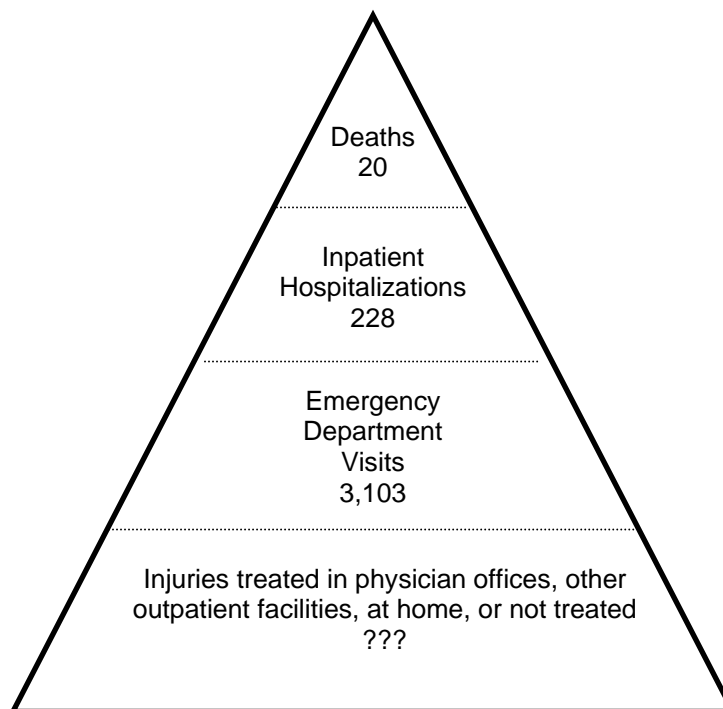


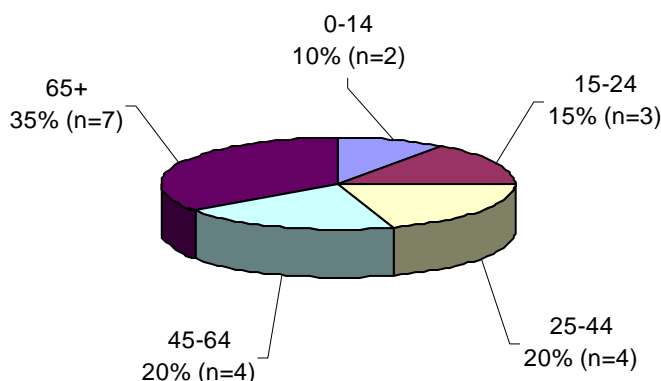
Figure 1 shows an injury pyramid for residents of Santa Cruz County during 2005. This pyramid shows that deaths represent the smallest proportion of injuries. The proportions increase towards the foundation of the pyramid, which is comprised of

hospital discharges, emergency department visits, and self care. Although injuries that do not require medical treatment may be the most numerous, no existing datasets capture these types of injuries.

Deaths

In 2005, there were 20 injury-related deaths in Santa Cruz County. Most of these deaths were among males (85 percent, n=17), and females accounted for 15 percent (n=3). The largest percentage of deaths was among individuals 65 years and older (35 percent, n=7). Age distributions are shown in Figure 2.

Figure 2. Injury-Related Deaths by Age Group, Santa Cruz County, Arizona 2005 (n=20)

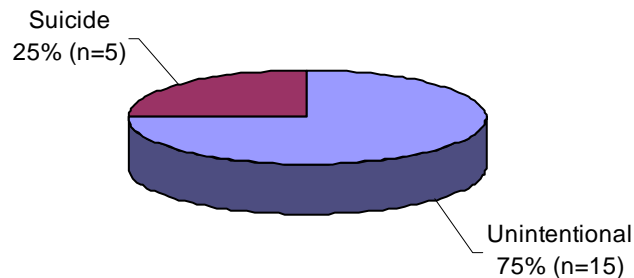


Hispanics accounted for the majority of injury-related deaths in Santa Cruz County (70 percent, n=14), followed by Non-Hispanic Whites (30 percent, n=6). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

Unintentional injury is the leading cause of death among individuals ages 1 to 44 years in Santa Cruz County and in the state of Arizona as a whole.¹ Seventy-five percent of injury-related deaths in Santa Cruz County were due to unintentional injuries (n=15) and 25 percent were suicides (n=5). There were no homicides in Santa Cruz County during 2005. Figure 3 shows injury-related deaths by intent.

¹ Arizona Health Status and Vital Statistics 2005.

Figure 3. Injury-Related Deaths by Intent, Santa Cruz County, Arizona 2005 (n=20)



Santa Cruz County Injury-Related Deaths Compared to Other Arizona Counties

Table 1 shows the intent of injury-related deaths for residents of Santa Cruz County compared to residents of the rest of Arizona. The leading intent of injury-related deaths was unintentional for both Santa Cruz County and the remaining counties, accounting for the majority of injury-related deaths. There were no homicides and no injury-related deaths of undetermined intent in Santa Cruz County.

Table 1. Intent of Injury-Related Deaths, Santa Cruz County Compared to Other Arizona Counties, 2005			
Santa Cruz County (n=20)		Arizona, excluding Santa Cruz County (n=4,570)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	75	Unintentional	65
Suicide	25	Suicide	20
Homicide	0	Homicide	11
Undetermined	0	Undetermined	4

Unintentional Injury

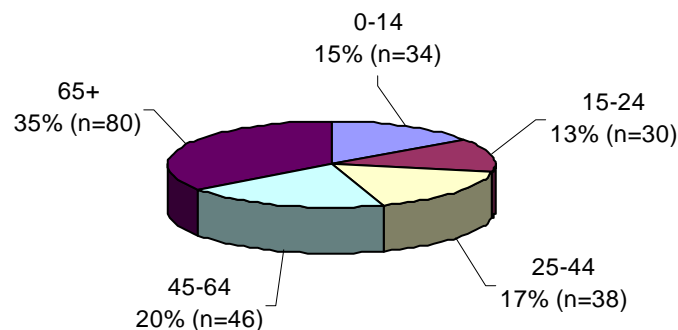
The most common cause of unintentional injury-related deaths in Santa Cruz County was motor vehicle traffic crashes (67 percent, n=10). Twenty percent of unintentional injury deaths were due to falls (n=3). The causes of unintentional injury-related deaths during 2005 in Santa Cruz County are shown in Table 2.

Table 2. Causes of Unintentional Injury-Related Deaths among Santa Cruz County Residents, Arizona 2005		
Cause	Number	Percent
Motor vehicle traffic	10	67%
Fall	3	20%
Other/unspecified	2	13%
Total	15	100%

Non-Fatal Inpatient Hospitalizations

In 2005, there were 228 non-fatal inpatient hospitalizations due to injury among residents of Santa Cruz County. Forty-eight percent were male (n=109) and 52 percent were female (n=119). Thirty-five percent of the hospitalizations were among individuals 65 years and older (n=80). Figure 4 shows injury-related inpatient hospitalizations by age group among residents of Santa Cruz County.

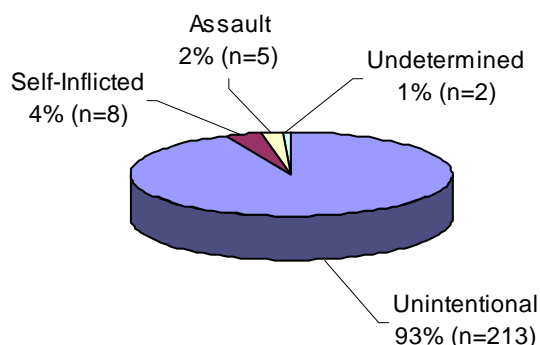
**Figure 4. Injury-Related Inpatient Hospitalizations
by Age Group, Santa Cruz County,
Arizona 2005 (n=228)**



There were 123 injury-related hospitalizations among Hispanic residents of Santa Cruz County (54 percent). The second highest number was among White, Non-Hispanics (44 percent, n=100). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

Ninety-three percent of the inpatient hospitalizations were due to unintentional injuries (n=213); 4 percent were due to self-inflicted injuries (n=8); 2 percent were due to assaults (n=5); and 1 percent were of undetermined intent (n=2). Figure 5 shows injury-related hospitalizations by intent.

Figure 5. Injury-Related Inpatient Hospitalizations by Intent, Santa Cruz County, Arizona 2005 (n=228)



Santa Cruz County Injury-Related Hospitalizations Compared to Other Arizona Counties

Table 3 shows the intent of injury-related hospitalizations for residents of Santa Cruz County compared to residents of the rest of Arizona. The leading intent of injury-related hospitalizations was unintentional for both Santa Cruz County and the remaining counties, accounting for the majority of injury-related hospitalizations. Santa Cruz County had a smaller percentage of hospitalizations due to self-inflicted injuries (4 percent) than the remainder of Arizona (8 percent). Santa Cruz County also had a smaller percentage of hospitalizations due to assaults (2 percent) than the remaining counties (6 percent).

Table 3. Intent of Injury-Related Inpatient Hospitalizations, Santa Cruz County Compared to Other Arizona Counties, 2005			
Santa Cruz County (n=228)		Arizona, excluding Santa Cruz County (n=34,796)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	93	Unintentional	84
Self-Inflicted	4	Self-Inflicted	8
Assault	2	Assault	6
Undetermined	1	Undetermined	2

The most common causes of unintentional injury-related hospitalizations in Santa Cruz County were falls (47 percent, n=100) and motor vehicle traffic crashes (17 percent, n=37). Table 4 shows the causes of unintentional injury-related hospitalizations among residents of Santa Cruz County.

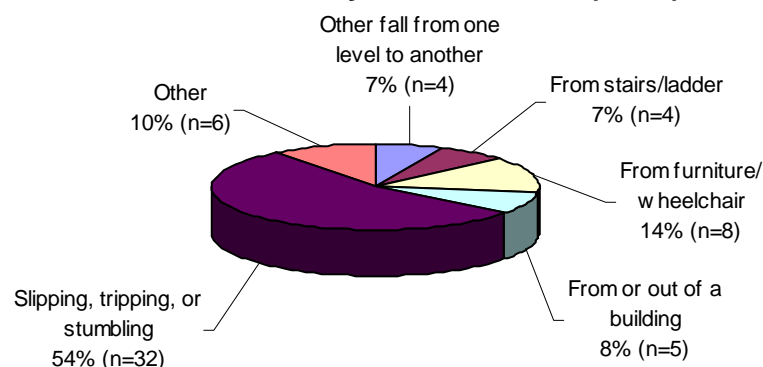
Table 4. Causes of Unintentional Injury-Related Inpatient Hospitalizations among Santa Cruz County Residents, Arizona 2005		
Cause	Number	Percent
Fall	100	47%
Motor vehicle traffic	37	17%
Other/unspecified	23	11%
Motor vehicle non-traffic	13	6%
Nature/environment	12	6%
Poisoning	11	5%
Struck by/against	6	3%
Other pedal cycle	6	3%
Overexertion	5	2%
Total	213	100%

Falls

Males accounted for 37 percent of unintentional fall-related hospitalizations (n=37) and females accounted for 63 percent (n=63). Six percent of fall-related hospitalizations were among children 14 years and under (n=6); 2 percent were among individuals ages 15 to 24 years (n=2); 32 percent were among individuals ages 25 to 64 years (n=32); and 60 percent were among individuals 65 years and older (n=60).

For 41 percent of unintentional fall-related inpatient hospitalizations, information regarding contributing event was not specified in the hospital discharge database (n=41). Among the hospitalizations for which contributing event was specified, 54 percent were due to slipping, tripping, or stumbling (n=32). Figure 6 shows unintentional fall-related hospitalizations by contributing event.

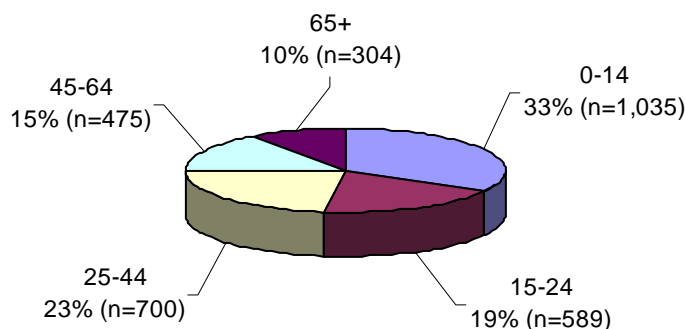
Figure 6. Inpatient Hospitalizations due to Unintentional Falls by Contributing Event, Santa Cruz County, Arizona 2005 (n=59)



Non-Fatal Emergency Department Visits

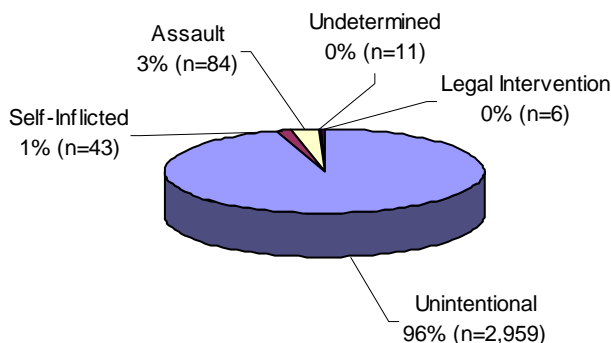
In 2005, there were 3,103 injury-related emergency department visits among residents of Santa Cruz County. Males accounted for 57 percent of these visits (n=1,759) and females accounted for 43 percent (n=1,344). The largest percentage of visits was among children 14 years and under (33 percent, n=1,035). Figure 7 shows injury-related emergency department visits by age group.

Figure 7. Injury-Related Emergency Department Visits by Age Group, Santa Cruz County, Arizona 2005 (n=3,103)



Ninety-six percent of the emergency department visits were due to unintentional injuries (n=2,959); 3 percent were due to assaults (n=84); and 1 percent were due to self-inflicted injuries (n=43). Eleven emergency department visits were of undetermined intent and 6 visits were due to legal intervention. Figure 8 shows emergency department visits by intent.

Figure 8. Injury-Related Emergency Department Visits by Intent, Santa Cruz County, Arizona 2005 (n=3,103)



Santa Cruz County Injury-Related Emergency Department Visits Compared to Other Arizona Counties

Table 5 shows the intent of injury-related emergency department visits for residents of Santa Cruz County compared to residents of the rest of Arizona. The leading intent of injury-related visits was unintentional for both Santa Cruz County and the remaining counties, accounting for the majority of injury-related visits. Santa Cruz County and the rest of Arizona had similar percentages of visits due to self-inflicted injuries and assaults.

Table 5. Intent of Injury-Related Emergency Department Visits, Santa Cruz County Compared to Other Arizona Counties, 2005			
Santa Cruz County (n=3,103)		Arizona, excluding Santa Cruz County (n=375,568)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	96	Unintentional	94
Self-Inflicted	1	Self-Inflicted	1
Assault	3	Assault	4
Undetermined	0	Undetermined	1

The most common causes of unintentional injury-related emergency department visits in Santa Cruz County were falls (29 percent, n=858) and struck by/against injuries (16 percent, n=483). Table 6 shows the causes of unintentional injury-related emergency department visits for Santa Cruz County residents in 2005.

Table 6. Causes of Unintentional Injury-Related Emergency Department Visits among Santa Cruz County Residents, Arizona 2005		
Cause	Number	Percent
Fall	858	29%
Struck by/against	483	16%
Cut/pierce	315	11%
Nature/environment	277	10%
Motor vehicle traffic	272	9%
Other/unspecified	246	8%
Overexertion	232	8%
Other pedal cycle	62	2%
Poisoning	53	2%
Motor vehicle non-traffic	52	2%
Fire/hot object	40	1%
Machinery	36	1%
Transport	33	1%
Total	2,959	100%

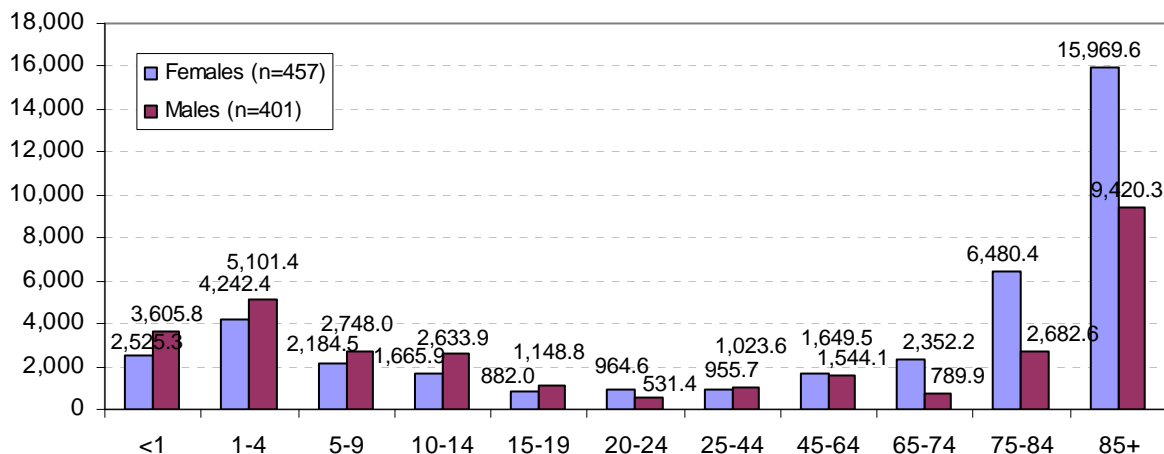
Falls

There were 858 emergency department visits due to unintentional falls. Males accounted for 47 percent of these visits (n=401) and females accounted for 53 percent (n=457). Children 14 years and under had the highest percentage of unintentional fall-

related emergency department visits (42 percent, n=364). Six percent of visits were among individuals ages 15 to 24 years (n=55); 31 percent were among individuals ages 25 to 64 years (n=263); and 21 percent were among individuals 65 years and older (n=176).

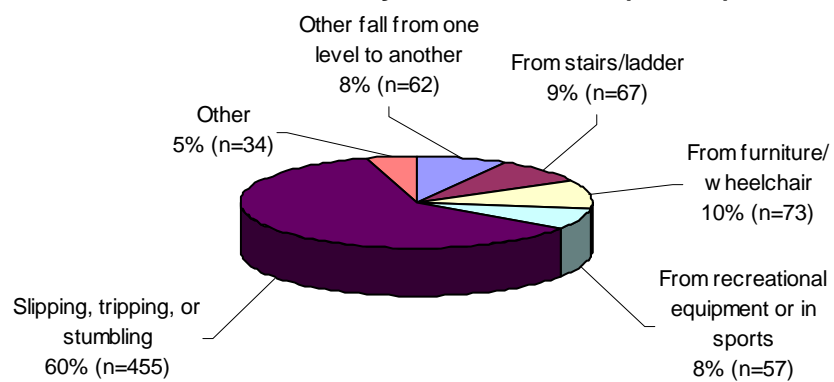
The highest rates of unintentional fall-related emergency department visits were among older adults. Females 85 years and older had a rate of 15,969.6 fall-related emergency department visits per 100,000 residents. Figure 9 shows emergency department visit rates of unintentional falls by age group and gender.

Figure 9. Unintentional Fall-Related Emergency Department Visit Rates per 100,000, Santa Cruz County, Arizona 2005 (n=858)



For 13 percent of the unintentional fall-related emergency department visits, information regarding contributing event was not specified in the emergency department database (n=110). Among the emergency department visits for which contributing event was specified, 60 percent of unintentional falls were due to slipping, tripping, or stumbling (n=455). Figure 10 shows emergency department visits due to unintentional falls by contributing event.

Figure 10. Emergency Department Visits due to Unintentional Falls by Contributing Event, Santa Cruz County, Arizona 2005 (n=748)



Summary

In 2005, there were 20 injury-related deaths in Santa Cruz County, and the largest percentage of deaths was among adults 65 years and older (35 percent, n=7). The majority of these deaths were due to unintentional injuries (75 percent, n=15). The most common cause of unintentional injury deaths was motor vehicle traffic crashes (67 percent, n=10). For residents of Santa Cruz County, unintentional injury is the leading cause of death for individuals ages 1 to 44 years.¹ Twenty-five percent of injury-related deaths in Santa Cruz County were suicides (n=5). There were no homicides among residents of Santa Cruz County in 2005.

There were 228 non-fatal inpatient hospitalizations due to injury among residents of Santa Cruz County. Thirty-five percent of the hospitalizations were among adults 65 years and older (n=80). Ninety-three percent of the hospitalizations were due to unintentional injuries (n=213); 4 percent were due to self-inflicted injuries (n=8); 2 percent were assaults (n=5); and 1 percent were of undetermined intent (n=2). The most common cause of unintentional injury-related hospitalizations was falls (47 percent, n=100).

There were 3,103 injury-related non-fatal emergency department visits among residents of Santa Cruz County in 2005. The largest percentage of visits was among children 14 years and under (33 percent, n=1,035). Ninety-six percent of the emergency department visits were due to unintentional injuries (n=2,959); 3 percent were due to assaults (n=84); and 1 percent were due to self-inflicted injuries (n=43). Eleven injury-related emergency department visits were of undetermined intent and 6 visits were due to legal intervention. The most common cause of unintentional injury-related emergency department visits was falls (29 percent, n=858).

Source for deaths: 2005 Death Certificate Database

Source for hospitalizations: 2005 Inpatient Hospital Discharge Database

Source for emergency department visits: 2005 Outpatient Emergency Department Database

Arizona Counties with Population, 2005

